Serial No. 10/014,509 Docket No. 382684/00 2

AMENDMENTS TO THE CLAIMS:

- 1-3. (Canceled)
- 4. (Currently Amended) A liquid crystal display device, comprising:
 - a first substrate on which a plurality of pixel electrodes are formed;
 - a second substrate on which an opposing electrode is formed;
- a liquid crystal layer sandwiched between said first and second substrates, said second substrate further having thereon a plurality of protrusions, each of said protrusions being positioned at a substantially central portion of a corresponding one of said pixel electrodes and elongated toward the first substrate; and

an alignment layer formed between said plurality of protrusions and said first substrate,

wherein said plurality of protrusions comprises a rod-shaped spacer extending between said first and second substrates.

- 5. (Canceled)
- 6. (Canceled)
- 7. (Previously presented) A liquid crystal display device, comprising:
 - a first substrate on which a plurality of pixel electrodes are formed;
 - a second substrate on which an opposing electrode is formed; and
- a liquid crystal layer sandwiched between said first and second substrates, said second substrate further having thereon a plurality of protrusions, each of said protrusions being positioned at a substantially central portion of a corresponding one of said pixel electrodes,
 - wherein said protrusions comprise an isotropic material and a black material.
- 8. (Previously presented) A liquid crystal display device, comprising:
 - a first substrate on which a plurality of pixel electrodes are formed;
 - a second substrate on which an opposing electrode is formed;

Serial No. 10/014,509 Docket No. 382684/00 3

a liquid crystal layer sandwiched between said first and second substrates, said second substrate further having thereon a plurality of protrusions, each of said protrusions being positioned at a substantially central portion of a corresponding one of said pixel electrodes; and

a light-shielding layer formed on said protrusions, to inhibit a leakage of light through said liquid crystal layer.

9-10. (Canceled)

- 11. (Previously presented) A liquid crystal display device, comprising:
 - a first substrate on which a plurality of pixel electrodes are formed;
 - a second substrate on which an opposing electrode is formed; and
- a liquid crystal layer sandwiched between said first and second substrates, said second substrate further having thereon a plurality of protrusions, each of said protrusions being positioned at a substantially central portion of a corresponding one of said pixel electrodes,

wherein said opposing electrode comprises a plurality of stripe-shaped electrodes formed perpendicularly to said plurality of pixel electrodes, an intersection of a pixel electrode in said plurality of pixel electrodes and a stripe-shaped electrode in said plurality of stripe-shaped electrodes, defining a pixel of said liquid crystal display device.

- 12. (Previously presented) The device as claimed in claim 11, wherein an electric field formed in said liquid crystal layer between said pixel electrode and a corresponding one of said opposing electrodes is tilted toward a center of said pixel.
- 13. (Previously presented) The device as claimed in claim 12, wherein said electric field causes molecules of said liquid crystal layer to be symmetrically oriented toward center of said pixel.
- 14. (Canceled)
- 15. (Previously presented) The device as claimed in claim 4, wherein said pixel electrodes

PAGE 5/13 * RCVD AT 6/13/2006 10:55:12 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/8 * DMIS:2738300 * CSID:7037612375 * DURATION (mm-ss):04-00

Serial No. 10/014,509 Docket No. 382684/00 4

comprise notches formed on peripheral portions of said pixel electrodes.

16. - 17. (Canceled)

18. (Previously presented) The device as claimed in claim 4, wherein said pixel electrodes comprise concave portions extending radially outward from centers of said pixel electrodes.

19-20. (Canceled)

- 21. (Previously presented) The device as claimed in claim 4, wherein said rod-shaped spacer is formed in a central portion of an area of said pixel electrode.
- 22. (Previously presented) The device as claimed in claim 4, wherein said protrusions extend in a direction of said first substrate from substantially symmetrical centers of corresponding ones of said pixel electrodes.
- 23. (Previously presented) The device as claimed in claim 4, wherein said rod-shaped spacer defines a plurality of domains of said liquid crystal layer for a corresponding one of said pixel electrodes.
- 24. (Previously presented) A liquid crystal display device, comprising:
 - a first substrate on which a plurality of pixel electrodes are formed;
 - a second substrate on which an opposing electrode is formed; and
- a liquid crystal layer sandwiched between said first and second substrates, said second substrate further having thereon a plurality of protrusions, each of said protrusions being positioned at a substantially central portion of a corresponding one of said pixel electrodes,

wherein said plurality of protrusions comprises a rod-shaped spacer extending between said first and second substrates,

wherein said rod-shaped spacer defines a plurality of domains of said liquid crystal layer for a corresponding one of said pixel electrodes, and

Serial No. 10/014,509 Docket No. 382684/00 5

wherein said plurality of domains comprises a plurality of symmetrical liquid crystal domains.

- 25. (Previously presented) A liquid crystal display device, comprising:
 - a first substrate on which a plurality of pixel electrodes are formed;
 - a second substrate on which an opposing electrode is formed; and
- a liquid crystal layer sandwiched between said first and second substrates, said second substrate further having thereon a plurality of protrusions, each of said protrusions being positioned at a substantially central portion of a corresponding one of said pixel electrodes,

wherein said plurality of protrusions comprises a rod-shaped spacer extending between said first and second substrates,

wherein said rod-shaped spacer defines a plurality of domains of said liquid crystal layer for a corresponding one of said pixel electrodes, and

wherein a liquid crystal material in said liquid crystal layer is alignable differently in one of said plurality of domains than in another one of said plurality of domains.

- 26. (New) The device as claimed in claim 4, wherein said first and second substrates are joined via said rod-shaped spacer.
- 27. (New) The device as claimed in claim 4, wherein said rod-shaped spacer comprises a cross-sectional configuration which is similar to a cross-sectional configuration of said corresponding one of said pixel electrodes.